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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/654,941

09/05/2003

Ryuichi Sato

040894-5949

5489

9629 7590 05/07/2007  
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EXAMINER

MORRISON, THOMAS A

ART UNIT

PAPER NUMBER

3653

MAIL DATE

DELIVERY MODE

05/07/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/654,941	<b>Applicant(s)</b> SATO, RYUICHI	
	<b>Examiner</b> Thomas A. Morrison	<b>Art Unit</b> 3653	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-9 and 12-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3-9 and 12-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### **DETAILED ACTION**

1. The indicated allowability of claims 1, 3-5 and 12-14 is withdrawn in view of the newly discovered reference(s) to U.S. Patent No. 6,220,592 (Watanabe et al.) and U.S. Patent No. 6,398,214 (Moteki et al.). Rejections based on the newly cited reference(s) follow.

#### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 8 recites the limitation "the reference position" in line 2. There is insufficient antecedent basis for this limitation in the claim.

#### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 6-9, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,398,214 (Moteki et al.).

Regarding claim 6, Figs. 1-10 show a sheet processing apparatus (Fig. 1) comprising:

a compiling tray (30) for receiving and stacking conveyed sheets;

a longitudinal reference wall (31) for performing alignment of sheets stacked on the compiling tray (30) by aligning rear ends of the sheets;

a longitudinal alignment portion (including 50) that gives a conveyance force to sheets sequentially supplied to the compiling tray (30) to push the supplied sheets against the longitudinal reference wall (31), the longitudinal alignment portion (50) being a paddle member; and

a controller that controls a position of the longitudinal alignment portion (including 50) in a direction of thickness of sheets stacked on the compiling tray (30) (see e.g., structure in Figs. 3B-3C, column 6, lines 45-56 and column 7, lines 53-56).

Regarding claim 7, Figs. 1-10 show that the longitudinal alignment portion (including 50) conveys the sheet to the longitudinal reference wall (31) by using a member (Fig. 4C) that turns by simultaneously touching a surface of the sheet.

Regarding claim 8, as best understood, the controller controls the reference position of the longitudinal alignment portion according to the number of sheets stacked on the compiling tray (30). See e.g., column 3, lines 16-20.

Regarding claim 9, Figs. 1-10 show that the longitudinal alignment portion (including 50) conveys sheets to the longitudinal reference wall (31) when placed at a sheet alignment position (e.g., Fig. 4A), and wherein the longitudinal alignment portion (including 50) once moves from the sheet alignment position (Fig. 4A) to a sheet pressing position (Fig. 4B) in synchronization with predetermined sheet conveying timing, and then returns to the sheet alignment position (Fig. 4A).

4. Claims 6-9, as best understood, are rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent No. 6,220,592 (Watanabe et al.).

Regarding claim 6, Figs. 1-62 show a sheet processing apparatus (Fig. 1) comprising:

- a compiling tray (12) for receiving and stacking conveyed sheets;
- a longitudinal reference wall (33) for performing alignment of sheets stacked on the compiling tray (12) by aligning rear ends of the sheets;
- a longitudinal alignment portion (including 31) that gives a conveyance force to sheets sequentially supplied to the compiling tray (12) to push the supplied sheets against the longitudinal reference wall (33), the longitudinal alignment portion (including 31) being a paddle member; and
- a controller that controls a position of the longitudinal alignment portion (including 31) in a direction of thickness of sheets stacked on the compiling tray (12) (see e.g., Figs. 13-16 and column 14, lines 12-38).

Regarding claim 7, Figs. 1-62 show that the longitudinal alignment portion (including 31) conveys the sheet to the longitudinal reference wall (33) by using a member (Fig. 15) that turns by simultaneously touching a surface of the sheet.

Regarding claim 8, as best understood, the controller controls the reference position of the longitudinal alignment portion according to the number of sheets stacked on the compiling tray (12). See e.g., column 14, lines 12-21.

Regarding claim 9, Figs. 1-62 show that the longitudinal alignment portion (including 31) conveys sheets to the longitudinal reference wall (33) when placed at a

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sheet alignment position (e.g., Fig. 15), and wherein the longitudinal alignment portion (including 31) once moves from the sheet alignment position (Fig. 15) to a sheet pressing position (Fig. 13) in synchronization with predetermined sheet conveying timing, and then returns to the sheet alignment position (Fig. 15).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 3-5 and 12-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,220,592 (Watanabe et al.) in view of U.S. Patent No. 6,371,471 (Fukazu et al.).

Regarding claim 1, Figs. 1-62 of Watanabe et al. show a sheet processing apparatus (Fig. 1) comprising:

a compiling tray (12) for forming a sheet bundle by sequentially collecting sheets supplied thereto;

a sheet alignment portion (including 33) for aligning sheets supplied to the compiling tray (12); and

a pressing member (including 17b), provided in such a way as to be able to advance and retract in a direction of thickness of the sheets collected in the compiling

tray (12), for holding sheets already collected in the compiling tray (12) and aligned in the sheet alignment portion (including 33) when a new sheet is supplied to the compiling tray (12); and

a controller that controls the pressing member (including 17b) according to a thickness of sheets collected on the compiling tray (12). See e.g., column 14, lines 14-30.

Also, the pressing member (including 17b) is provided in such a way as to advance and retract between an advancing position (Fig. 13), at which the pressing member (including 17b) presses sheets on the compiling tray (12), and a retreating position (Fig. 14) at which the pressing member (including 17b) does not hinder the sheets on the compiling tray (12) from being discharged therefrom. Also, the Watanabe et al. patent discloses that papers are supplied to the Watanabe apparatus from an image forming apparatus. See e.g., column 1, lines 5-10. Moreover, Watanabe et al. discloses that advancing and retracting operations of the pressing member (including 17b) vary according to the thickness of the sheets on the compiling tray (12). See e.g., column 14, lines 14-30. However, Watanabe et al. does not specifically show that advancing and retracting operations of the pressing member vary according to whether or not folding is performed on sheets newly supplied to the compiling tray, as claimed.

The Fukazu et al. patent discloses that it is well known to supply sheets to a sheet processing apparatus (500) from an image forming apparatus (300) via a folder (400), for the purpose of folding the sheets prior to supplying such sheets to the sheet

processing apparatus (500). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Watanabe et al. apparatus on an image forming apparatus having a folder for the purpose of folding the sheets prior to supplying such sheets to the Watanabe et al. apparatus, as taught by Fukazu et al. Providing the Watanabe et al. apparatus on an image forming apparatus having a folder will result in folded sheets being supplied to the Watanabe et al. apparatus. Since the advancing and retracting operations of the pressing member (including 17b) vary according to the thickness of the sheets on the compiling tray (12) and folded sheets from the folder have a greater thickness than non-folded sheets, the advancing and retracting operations of the pressing member will vary according to whether or not folding is performed on sheets newly supplied to the compiling tray, as claimed. In other words, folding will result in thicker sheets added to the compiling tray (12), which will then cause the pressing member to operate based on these thicker sheets. Thus, all of the limitations of claim 1 are met.

Regarding claim 3, Figs. 1-62 of Watanabe et al. show a guide member (20), provided in such a way as to be able to be interlocked with the pressing member (including 17b), for guiding a sheet newly supplied to the compiling tray (12).

Regarding claim 4, providing the Watanabe et al. apparatus on an image forming apparatus having a folder, in a manner as taught by Fukazu et al., will result in the advancing and retracting operations of the pressing member (including 17b) varying according to what supply portions supply new sheets to the compiling tray (12). More specifically, the image forming apparatus can supply (1) thin non-folded sheets directly



to the compiling tray (12) by bypassing the folding operation in the folder or (2) thick (i.e., folded) sheets from the image forming apparatus and the folder. Such thick or thin sheets will result in variation of the advancing and retracting operations of the pressing member (including 17b). Thus, all of the limitations of claim 4 are met.

Regarding claim 5, as best understood, Figs. 1-62 of Watanabe et al. show that the pressing member (including 17b) presses sheets already collected on the compiling tray (12) before a leading end of a sheet newly supplied to the compiling tray (12) touches the sheets already collected thereon, and wherein the pressing member (including 17b) goes away from the collected sheets before a rear end of the newly supplied sheet is discharged onto the compiling tray (12).

Regarding claim 12, Figs. 1-62 of Watanabe et al. show a sheet processing apparatus (Fig. 1) comprising:

- a compiling tray (12) for receiving and stacking supplied sheets;

- a longitudinal reference wall (33) for performing alignment of sheets stacked on the compiling tray (12) by aligning rear ends of the sheets;

- a first moving-aside unit (including 32) for moving the sheets aside toward the longitudinal reference wall (33) at a rear end side of the sheets supplied to the compiling tray (12); and

- a second moving-aside unit (including 31 and 20) for moving the sheets aside toward the longitudinal reference wall (33) at a leading end side of each of the sheets,

wherein the second moving-aside unit (including 31 and 20) is provided closer to the leading end side than the first moving-aside unit (32);

a conveyance force of the second moving-aside unit (including 31 and 20) is used for moving the sheets aside toward the longitudinal reference wall (33), and set therein in such a way as to be variable. Also, the Watanabe et al. patent discloses that papers are supplied to the Watanabe apparatus from an image forming apparatus. See e.g., column 1, lines 5-10. Moreover, Watanabe et al. discloses that the second moving-aside unit (including 31 and 20) is set in a way that varies according to the thickness of the sheets on the compiling tray (12). See e.g., column 14, lines 14-30. However, Watanabe et al. does not specifically show that the second moving-aside unit is set in a manner that varies according to whether or not folding is performed on sheets stacked on the compiling tray, as claimed.

The Fukazu et al. patent discloses that it is well known to supply sheets to a sheet processing apparatus (500) from an image forming apparatus (300) via a folder (400), for the purpose of folding the sheets prior to supplying such sheets to the sheet processing apparatus (500). It would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the Watanabe et al. apparatus on an image forming apparatus having a folder for the purpose of folding the sheets prior to supplying such sheets to the Watanabe et al. apparatus, as taught by Fukazu et al. Providing the Watanabe et al. apparatus on an image forming apparatus having a folder will result in folded sheets being supplied to the Watanabe et al. apparatus. Since the second moving-aside unit (including 31 and 20) is set in a way that varies according to

the thickness of the sheets on the compiling tray (12) and folded sheets from the folder have a greater thickness than non-folded sheets, the second moving-aside unit (including 31 and 20) will be set in a manner that varies according to whether or not folding is performed on sheets newly supplied to the compiling tray, as claimed. In other words, folding will result in thicker sheets added to the compiling tray (12), which will then cause the second moving-aside unit (including 31 and 20) to operate based on these thicker sheets. Thus, all of the limitations of claim 12 are met.

Regarding claim 13, Figs. 13-15 of Watanabe et al. show that the second moving-aside unit (including 31 and 20) is enabled to move in a direction of thickness of a sheet bundle accommodated in the compiling tray (12).

Regarding claim 14, Figs. 13-15 of Watanabe et al. show that the second moving-aside unit (including 31 and 20) changes a position thereof in a direction of thickness of a sheet bundle according to the sheet bundle stacked on the compiling tray (12). See also column 14, lines 12-21 of Watanabe et al.

### ***Response to Arguments***

6. Applicant's arguments with respect to claims 6-9 have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Thomas A. Morrison whose telephone number is (571) 272-7221. The examiner can normally be reached on M-F, 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Mackey can be reached on (571) 272-6916. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

09/30/2006



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